



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,265	12/01/2005	Hayahide Yamasaki	2005-1598A	1853
513 7590 03/04/2008 WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021				
EXAMINER				
PEZZUTO, HELEN LEE				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
03/04/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/553,265

**Applicant(s)**

YAMASAKI, HAYAHIDE

**Examiner**

Helen L. Pezzuto

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/309)  
Paper No(s)/Mail Date 12/7/07, 12/17/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

Applicant's amendment to claim 1 filed in the response on 12/7/07 is acknowledged. Currently, claims 1-8 are pending in this application.

***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 12/7/07 and 12/17/07 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over La Fleur et al. (US-399) for the reasons of record.

US 6,593,399 B1 to La Fleur et al. discloses a method of preparing an intrinsically conductive polymer in the

Art Unit: 1796

presence of emulsion latexes. Specifically, prior art teaches polymerization of at least one cyclic heteroatom-containing monomer (i.e. aniline) in the presence of an emulsion latex copolymer (col. 2, line 28 to col. 3, line 24). Suitable emulsion latex copolymer can be prepared from (meth)acrylic acid, and N-vinylpyrrolidone, encompassing applicant's emulsion polymer expressed in the present claims (col. 3, lines 25-65; col. 10, lines 24-58)). Prior art further teaches using 85 wt% to 100 wt% of monomer or monomer mixtures from groups A and/or B (i.e. (meth)acrylic acid, N-vinylpyrrolidone). Accordingly, it would have been obvious to one having ordinary skill in the art to prepare a polyaniline-containing composition as taught by the method disclosed in US-399, motivated by the reasonable expectation of success. Furthermore, once the motivation to prepare the polyaniline-containing composition is provided, one having ordinary skill in the art would have readily envisaged the relative proportions of vinylpyrrolidone and the acid group-containing monomers used in the emulsion latex as well as the content of polyaniline under the general guidance of prior art disclosure via routine experimentation. Regarding the recited emeraldine-type of polyaniline, the examiner is of the position that it is

inherent in prior art product because applicant's product and that of the prior art appear to be substantially identical, as a dark green appearance was exemplified in the working examples using aniline as the cyclic heteroatom-containing monomer (see Examples 15, 19, 21, 23, 25, 27, 29, 31, 34, 36, and 38), indicative of the emeraldine-type product. Thus, rendering obvious the present claims.

***Response to Arguments***

Applicant's amendment and remarks filed on 12/7/07 have been fully considered but are not found to be persuasive. The crux of applicant's arguments lies in the claimed composition not being described in the examples of LaFleur et al. Firstly applicant urges that LaFleur et al. do not disclose an emulsion latex comprising both an acid group-containing monomer and vinylpyrrolidone, and that vinylpyrrolidone is not used at all in the Examples of the reference. This not found compelling, and Counsel is cordially directed to col. 3, lines 24-65, wherein latex copolymers prepared from one or more monomers selected from one or more of Groups A-D were taught by patentees. Suitable monomers from Group A and Group B include (meth)acrylic acid and N-vinylpyrrolidone, respectively, taught within the scope of the instant latex acid group-containing monomer and

Art Unit: 1796

vinylpyrrolidone comonomer. An emulsion prepared from monomer mixture containing methacrylic acid (MAA) and N-vinylpyrrolidone (NVP) was exemplified (col. 10, lines 20-58). Regarding the recited 0.02 to 10% by mass of polyaniline, the examiner is of the position that in certain examples, the amount of polyaniline in prior art are expected to fall within the range expressed in the present claims because about 10 wt% of aniline monomer is polymerized with the latex (see Examples 15, 19, 21, 23, 25, 27, 29, 31, 32, 34, 35, 36, 38). In any event, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Furthermore, applicant urges LaFleur et al. do not suggest the technical idea of using vinylpyrrolidone as a monomer of the emulsion polymer for uniform dispersion of the polyaniline, and the use of the acid group-containing monomer to function as a dopant for giving the polyaniline conductivity. The examiner disagrees because it is not necessary that prior art teach the same reason for including an component. The fact that applicant has recognized another advantage which would flow naturally from following the teaching of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. LaFleur et al. teach each component of the claimed composition, each component would

have performed the same function in the composition as it did separately, and once the components such as the acid group-containing monomer and vinylpyrrolidone were selected and used, they would necessarily perform the same functions in the composition. Thus, the combination of known prior art components accordingly to known methods to yield predictable results establishes a prima facie case of obviousness. Accordingly, the examiner's position is maintained.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L.

Art Unit: 1796

Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Helen L. Pezzuto/  
Primary Examiner  
Art Unit 1796

hlp



Application/Control Number: 10/553,265

Page 8

Art Unit: 1796

**Application Number****Application/Control No.**

10/553,265

**Examiner**

Helen L. Pezzuto

**Applicant(s)/Patent under  
Reexamination**

YAMASAKI, HAYAHIDE

**Art Unit**

1796